

ABSTRACT OF THE DISCLOSURE

A semiconductor device having a buried conductive layer and a method of manufacturing thereof are disclosed. In the semiconductor device, the buried conductive layer is formed in a first interlayer insulating layer. The conductive layer has a surface higher than a surface of the first interlayer insulating layer. Furthermore, the first interlayer insulating layer and the conductive layer are covered with an insulating film having a flat surface. On the insulating film, formed is a second interlayer insulating layer having a high etching selective ratio to the insulating film. The method of manufacturing the semiconductor device includes forming a first interlayer insulating layer on a semiconductor substrate, forming a trench in the first interlayer insulating layer, forming a conductive layer on the first interlayer insulating layer to bury the conductive layer in the trench, and polishing a surface of a resultant structure to form a flat surface to which the first interlayer insulating layer and the conductive layer are exposed. Furthermore, the method includes etching a damaged layer due to the polishing, forming an insulating film by coating on the surface of the resultant structure, and forming a second interlayer insulating layer, which has a high etching selective ratio to the insulating film, on the insulating film.